

#2

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/821,883

DATE: 04/23/2001
TIME: 13:12:41

Input Set : A:\7636-0022.30-SEQLIST.txt
Output Set: N:\CRF3\04232001\I821883.raw

4 <110> APPLICANT: Laus, Reiner
5 Vidovic, Damir
6 Graddis, Thomas
8 <120> TITLE OF INVENTION: Compositions and Methods for Dendritic
9 Cell-Based Immunotherapy
12 <130> FILE REFERENCE: 7636-0022.30
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/821,883
C--> 15 <141> CURRENT FILING DATE: 2001-03-30
17 <150> PRIOR APPLICATION NUMBER: US 60/193,504
18 <151> PRIOR FILING DATE: 2000-03-30
20 <160> NUMBER OF SEQ ID NOS: 30
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 555
26 <212> TYPE: PRT
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: HER500 construct
32 <400> SEQUENCE: 1
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35 Gly Phe Leu Phe Leu Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala
36 20 25 30
37 Lys Glu Leu Ala Arg Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr
38 35 40 45
39 Asp Met Lys Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met
40 50 55 60
41 Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu
42 65 70 75 80
43 Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile
44 85 90 95
45 Gln Glu Val Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln
46 100 105 110
47 Val Pro Leu Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu
48 115 120 125
49 Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn
50 130 135 140
51 Thr Thr Pro Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln
52 145 150 155 160
53 Leu Arg Ser Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg
54 165 170 175
55 Asn Pro Gln Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe
56 180 185 190
57 His Lys Asn Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser
58 195 200 205
59 Arg Ala Cys His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp
60 210 215 220

ENTERED

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61 Gly Glu Ser Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala
 62 225 230 235 240
 63 Gly Gly Cys Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His
 64 245 250 255
 65 Glu Gln Cys Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu
 66 260 265 270
 67 Ala Cys Leu His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro
 68 275 280 285
 69 Ala Leu Val Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro
 70 290 295 300
 71 Glu Gly Arg Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr
 72 305 310 315 320
 73 Asn Tyr Leu Ser Thr Asp Val Gly Ser Gly Ala Gly Gly Met Val His
 74 325 330 335
 75 His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly Gly Asp Leu Thr
 76 340 345 350
 77 Leu Gly Leu Glu Pro Ser Glu Glu Ala Pro Arg Ser Pro Leu Ala
 78 355 360 365
 79 Pro Ser Glu Gly Ala Gly Ser Asp Val Phe Asp Gly Asp Leu Gly Met
 80 370 375 380
 81 Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Thr His Asp Pro Ser Pro
 82 385 390 395 400
 83 Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu Pro Ser Glu Thr
 84 405 410 415
 85 Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln Pro Glu Tyr Val
 86 420 425 430
 87 Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro Arg. Glu Gly Pro
 88 435 440 445
 89 Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu Arg Ala Lys Thr
 90 450 455 460
 91 Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly
 92 465 470 475 480
 93 Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln Gly Gly Ala Ala
 94 485 490 495
 95 Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu
 96 500 505 510
 97 Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala Pro Pro Ser Thr
 98 515 520 525
 99 Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr Leu Gly Leu Asp
 100 530 535 540
 101 Val Pro Ala Ala Ala His His His His His
 102 545 550 555
 104 <210> SEQ ID NO: 2
 105 <211> LENGTH: 690
 106 <212> TYPE: PRT
 107 <213> ORGANISM: Artificial Sequence
 109 <220> FEATURE:
 110 <223> OTHER INFORMATION: HER500-hGM-CSF construct
 112 <400> SEQUENCE: 2

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Input Set : A:\7636-0022.30-SEQLIST.txt
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113 Met Arg Ala Ala Pro Lèu Leu Ala Arg Ala Ala Ser Leu Ser Leu
114 1 5 10 15
115 Gly Phe Leu Phe Leu Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala
116 20 25 30
117 Lys Glu Leu Ala Arg Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr
118 35 40 45
119 Asp Met Lys Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met
120 50 55 60
121 Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu
122 65 70 75 80
123 Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile
124 85 90 95
125 Gln Glu Val Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln
126 100 105 110
127 Val Pro Leu Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu
128 115 120 125
129 Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn
130 130 135 140
131 Thr Thr Pro Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln
132 145 150 155 160
133 Leu Arg Ser Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg
134 165 170 175
135 Asn Pro Gln Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe
136 180 185 190
137 His Lys Asn Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser
138 195 200 205
139 Arg Ala Cys His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp
140 210 215 220
141 Gly Glu Ser Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala
142 225 230 235 240
143 Gly Gly Cys Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His
144 245 250 255
145 Glu Gln Cys Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu
146 260 265 270
147 Ala Cys Leu His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro
148 275 280 285
149 Ala Leu Val Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro
150 290 295 300
151 Glu Gly Arg Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr
152 305 310 315 320
153 Asn Tyr Leu Ser Thr Asp Val Gly Ser Gly Ala Gly Gly Met Val His
154 325 330 335
155 His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly Gly Asp Leu Thr
156 340 345 350
157 Leu Gly Leu Glu Pro Ser Glu Glu Glu Ala Pro Arg Ser Pro Leu Ala
158 355 360 365
159 Pro Ser Glu Gly Ala Gly Ser Asp Val Phe Asp Gly Asp Leu Gly Met
160 370 375 380
161 Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Thr His Asp Pro Ser Pro

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Input Set : A:\7636-0022.30-SEQLIST.txt
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162 385 390 395 400
 163 Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu Pro Ser Glu Thr
 164 405 410 415
 165 Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln Pro Glu Tyr Val
 166 420 425 430
 167 Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro Arg Glu Gly Pro
 168 435 440 445
 169 Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu Arg Ala Lys Thr
 170 450 455 460
 171 Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val Phe Ala Phe Gly
 172 465 470 475 480
 173 Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln Gly Gly Ala Ala
 174 485 490 495
 175 Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu
 176 500 505 510
 177 Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala Pro Pro Ser Thr
 178 515 520 525
 179 Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr Leu Gly Leu Asp
 180 530 535 540
 181 Val Pro Ala Ala Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro
 182 545 550 555 560
 183 Trp Glu His Val Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu
 184 565 570 575
 185 Ser Arg Asp Thr Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser
 186 580 585 590
 187 Glu Met Phe Asp Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu
 188 595 600 605
 189 Leu Tyr Lys Gln Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro
 190 610 615 620
 191 Leu Thr Met Met Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro
 192 625 630 635 640
 193 Glu Thr Ser Cys Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu
 194 645 650 655
 195 Asn Leu Lys Asp Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro
 196 660 665 670
 197 Val Gln Glu Gly Ala Pro Pro Pro Ala Ala Ala His His His His
 198 675 680 685
 199 His His
 200 690
 202 <210> SEQ ID NO: 3
 203 <211> LENGTH: 564
 204 <212> TYPE: PRT
 205 <213> ORGANISM: Artificial Sequence
 207 <220> FEATURE:
 208 <223> OTHER INFORMATION: HER500* construct
 210 <400> SEQUENCE: 3
 211 Met Arg Ala Ala Pro Leu Leu Leu Ala Arg Ala Ala Ser Leu Ser Leu
 212 1 5 10 15
 213 Gly Phe Leu Phe Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala

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Input Set : A:\7636-0022.30-SEQLIST.txt

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214 20 25 30
215 Lys Glu Leu Ala Arg Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr
216 35 40 45
217 Asp Met Lys Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met
218 50 55 60
219 Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu
220 65 70 75 80
221 Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile
222 85 90 95
223 Gln Glu Val Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln
224 100 105 110
225 Val Pro Leu Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu
226 115 120 125
227 Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn
228 130 135 140
229 Thr Thr Pro Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln
230 145 150 155 160
231 Leu Arg Ser Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg
232 165 170 175
233 Asn Pro Gln Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe
234 180 185 190
235 His Lys Asn Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser
236 195 200 205
237 Arg Ala Cys His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp
238 210 215 220
239 Gly Glu Ser Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala
240 225 230 235 240
241 Gly Gly Cys Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His
242 245 250 255
243 Glu Gln Cys Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu
244 260 265 270
245 Ala Cys Leu His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro
246 275 280 285
247 Ala Leu Val Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro
248 290 295 300
249 Glu Gly Arg Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr
250 305 310 315 320
251 Asn Tyr Leu Ser Thr Asp Val Gly Ser Ala Ser Ile Ile Asn Phe Glu
252 325 330 335
253 Lys Leu Gly Ala Gly Gly Met Val His His Arg His Arg Ser Ser Ser
254 340 345 350
255 Thr Arg Ser Gly Gly Asp Leu Thr Leu Gly Leu Glu Pro Ser Glu
256 355 360 365
257 Glu Glu Ala Pro Arg Ser Pro Leu Ala Pro Ser Glu Gly Ala Gly Ser
258 370 375 380
259 Asp Val Phe Asp Gly Asp Leu Gly Met Gly Ala Ala Lys Gly Leu Gln
260 385 390 395 400
261 Ser Leu Pro Thr His Asp Pro Ser Pro Leu Gln Arg Tyr Ser Glu Asp
262 405 410 415

VERIFICATION SUMMARY DATE: 04/23/2001
PATENT APPLICATION: US/09/821,883 TIME: 13:12:42

Input Set : A:\7636-0022.30-SEQLIST.txt
Output Set: N:\CRF3\04232001\I821883.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date